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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/675,967 | 10/02/2003 | Sung Uk Moon | 243449US90 | 6291 |

22850 7590 02/28/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

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| EXAMINER |
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NGUYEN, SIMON

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| ART UNIT | PAPER NUMBER |
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2618

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|--|-------------------|---------------|
| 3 MONTHS | 02/28/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/28/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/675,967

Applicant(s)

MOON ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1-3, the term "...without the base station being requested to send the retransmission signal" is not described in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui et al. (2004/0248579) in view of Koo et al. (20020071407).

Regarding claim 1, Fukui discloses a mobile system for transmitting a data signal from a BS to a MS (fig.11), wherein the BS comprises a signal transmitter (fig.1) configured to transmit and retransmit the data signal to the mobile station within a predetermined period (figs 1, 2, 5, 7-8, 10, 13); wherein the mobile station (fig.4) comprises; a receiving processor (inherently) configured to carry out receiving processing of data signal within the predetermined period; a quality detector for detecting a communication quality; and a reception processing decider for decide a processing method in accordance with the quality detection result (figs.2, 4-5, 7, 10, paragraph 23, 34, 52, 84, 89, 103-104). However, Fukui does not specifically disclose the retransmission of data is in a different form.

Koo discloses a method for transmitting/retransmitting data from a BS to a MS, wherein the BS retransmits data at a different form (rate) (abstract, figs.4-5, paragraphs 77-82). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Fukui, modified by Koo in order to prevent the repeat of retransmitting a data signal.

Regarding claim 2, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 3, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 9, Fukui further discloses wherein the quality detector for detecting a signal error, a signal to interference, and the communication quality (paragraphs 6-7, 30-32, 41, 87, 107).

Regarding claims 10-12, Fukui further discloses the receiver having a detector for detecting error in data transmission in order not receive the subsequent retransmission signal in the predetermined period (figs. 2, 13).

Regarding claims 13-15, Fukui further discloses the receiver having an error detector for detecting whether the received data need to be retransmitted and an error corrector for correcting retransmission data (paragraphs 87, 107).

Response to Arguments

5. Applicant's arguments filed 12/21/06 have been fully considered but they are not persuasive.

In Remarks, the applicant argued that the cited arts issued to Fukui et al. (2004/0248579) and Koo et al. (2004/0971407) fail to teach or suggest:

- a- retransmitting signal without the BS being requested (ACK) to send.
- b- the decider in the receiver decides whether or not to receive the data signal.

Responsive to a.

First, as being mentioned in the rejection under 35 U.S.C 112, first paragraph, this limitation is not supported in the SPEC.

Secondly, this limitation does not make sense, for example, data packet A is scheduled to transmit from a base station to a mobile unit within a predetermined time (for example, total transmission time is 1 hr, in which the data transmission is scheduled for 45 minutes and retransmitting portions of the packet A is scheduled for 15 minutes). Now a question is, how do you know what portions of the packet A the receiver unable

Art Unit: 2618

to process because the bad quality and need to retransmit?, if the transmitter keeps transmitting the packet data within the predetermined period without receiving any knowledge what frame portions of data need to retransmit, I am afraid the transmitter will keep retransmitting the good portions and time is running out for bad portions need to retransmit. As the result your invention really does not reduce the power consumption as argued but the method requires more power, take more time.

Thirdly, Fukui discloses the method for transmitting/retransmitting the data packet, in which the packet is scheduled to transmit and retransmit in a period of time. Any frames (portions) of the data did not success to transmit will be notification and retransmission.

Responsive to b.

Fukui discloses the receiver having an error detecting unit, wherein the error detecting unit judges whether or not an error is detected and based on the detection, whether the data is accepted or asked for retransmitting data (paragraphs 87-92).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2618

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

600 Dulany, Alexandria, VA 22314

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Hand-delivered response should be brought to Customer Service Window located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Application/Control Number: 10/675,967
Art Unit: 2618

Page 7

Simon Nguyen

February 12, 2007

A handwritten signature in black ink, appearing to read 'S. Nguyen'.

**SIMON NGUYEN
PRIMARY EXAMINER**